

MissouriState.



Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/27/2017 by William Bray (WBray@MissouriState.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

MTH181.Trigonometry

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

MTH 181 Trigonometry

Prerequisite: "C" grade or better in MTH 135 or appropriate placement score. General Education Course (Focus on Quantitative Literacy). Triangle trigonometry and its applications; trigonometric and inverse trigonometric functions; trigonometric identities and equations; Rational, exponential and logarithmic functions. Cannot receive credit toward graduation for both MTH 181 and MTH 138. Cannot count toward a mathematics major or minor. A grade of "C" or better is required in this course in order to take MTH 287. Cannot be taken Pass/Not Pass. 3(3-0) F.S

Revise the current online catalog description as needed: (Strike through all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → | **B I S**

MTH 181 Trigonometry

Prerequisite: "C" grade or better in MTH 135 or appropriate placement score. ~~General Education Course (Focus on Quantitative Literacy).~~ Triangle trigonometry and its applications; trigonometric and inverse trigonometric functions; trigonometric identities and equations; Rational, exponential and logarithmic functions. Cannot receive credit toward graduation for both MTH 181 and MTH 138. Cannot count toward a mathematics major or minor. A grade of "C" or better is required in this course in order to take MTH 287. General Education Quantitative Literacy requirement is fulfilled with a grade of "C" or better in MTH 181. Cannot be taken Pass/Not Pass. 3(3-0) F.S

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

This change removes MTH 181 as a Quantitative Literacy course in General Education.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information

Other (be specific): MTH 181 has MTH 135 as prerequisite and the latter satisfies the Quantitative Literacy Goals in General Education. Students who place into MTH 181 (by passing MTH 135) and pass MTH 181 with a C or better will have the QL requirement automatically met. Effectively, this streamlines the QL requirements.

Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

02/01/2017

Current Status:

College Council Review

Proposal Progress:

03/27/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.



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Missouri State.

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Curricular Action Workflow
 Missouri State > Computer Services - MIS > Curricular Action
 Workflow > CAW - Change Course Proposal Form
Change Course Proposal Form
Submitted on 03/27/2017 by William Bray (WBray@MissouriState.edu).
***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

MTH261 Analytic Geometry and Calculus I

Will this proposal need to be reviewed by CGEIP? No YesWill this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

MTH 261 Analytic Geometry and Calculus I

Prerequisite: "C" grade or better in MTH 138 or MTH 181 or appropriate placement score. General Education Course (Focus on Quantitative Literacy). Analytic geometry of the plane, limits, continuity, differentiation with applications, introductory integration with applications. A grade of "C" or better is required in this course in order to take MTH 280 or 288. Cannot be taken Pass/Not Pass. 5(5-0) F,S

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

MTH 261 Analytic Geometry and Calculus I

Prerequisite: "C" grade or better in MTH 138 or MTH 181 or appropriate placement score. ~~General Education Course (Focus on Quantitative Literacy).~~ Analytic geometry of the plane, limits, continuity, differentiation with applications, introductory integration with applications. A grade of "C" or better is required in this course in order to take MTH 280 or 288. General Education Quantitative Literacy requirement is fulfilled with a grade of "C" or better in MTH 261. Cannot be taken Pass/Not Pass. 5(5-0) F,S

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

This change removes MTH 261 as a Quantitative Literacy course in General Education.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information

Other (be specific): Prerequisites for MTH 261 are in the list of Quantitative Literacy courses under General Education. This streamlines the QL portion of General Education.

Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

02/01/2017

Current Status:

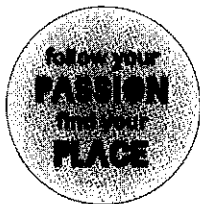
College Council Review

Proposal Progress:

03/27/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.



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Missouri State

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Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/27/2017 by William Bray (WBray@MissouriState.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

MTH287 Computational Calculus with Analytic Geometry I

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

MTH 287 Computational Calculus with Analytic Geometry I

Prerequisite: "C" or better in MTH 135 or MTH 138, or an approved score on a department placement test. General Education Course (Focus on Quantitative Literacy). Introduction to the concepts and methods of analytic geometry and differential and integral calculus with emphasis on applications in the natural sciences and technology. Cannot receive credit toward graduation for both MTH 287 and MTH 261. Cannot receive credit for both MTH 287 and MTH 285. A grade of "C" or better is required in this course in order to take MTH 288. Cannot be taken Pass/Not Pass. 3(3-0) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → B <i>I</i> S
<p>MTH 287 Computational Calculus with Analytic Geometry I</p> <p>Prerequisite: "C" or better in MTH 135 or MTH 138, or an approved score on a department placement test. General Education Course (Focus on Quantitative Literacy). Introduction to the concepts and methods of analytic geometry and differential and integral calculus with emphasis on applications in the natural sciences and technology. Cannot receive credit toward graduation for both MTH 287 and MTH 261. Cannot receive credit for both MTH 287 and MTH 285. A grade of "C" or better is required in this course in order to take MTH 288. General Education Quantitative Literacy requirement is fulfilled with a grade of "C" or better in MTH 287. Cannot be taken Pass/Not Pass. 3(3-0) F</p>

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

This change removes MTH 287 as a Quantitative Literacy course under General Education.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty input
- Student input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific): Prerequisites for MTH 287 satisfy the Quantitative Literacy goals under General Education. This streamlines the QL portion of General Education
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

02/01/2017

Current Status:

College Council Review

Proposal Progress:

03/27/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.



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Missouri State.

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Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - New Interdisciplinary Program Proposal Form

New Interdisciplinary Program Proposal Form

Submitted on 03/29/2017 by Matthew Siebert (MSiebert@MissouriState.edu).

This special form is to be used for internal Missouri State approval of a new Interdisciplinary program involving two or more academic departments/schools including graduate programs, undergraduate majors (comprehensive or non-comprehensive), minors, graduate certificates, undergraduate certificates.

New graduate programs, new undergraduate majors, and certificate programs involving more than 18 credit hours require approval by the CBHE as well as approval through the Missouri State curricular process. CBHE applications for such programs are processed through the Office of Institutional Research. All proposals for new programs requiring CBHE approval should progress through the Missouri State curricular process accompanied by a draft of the required CBHE documentation.

Only select departments with at least 9 hours or at least 30% of total program hours.

Sponsoring Department (1): (responsible for administration and budget)

Chemistry

Sponsoring Department (2):

Geography, Geology, & Planning

Sponsoring Department (3): (if applicable)

Physics, Astronomy, & Mat Sci

Sponsoring Department (4): (if applicable)

Proposed Program Title:

Foundations of Interdisciplinary Science

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Graduate Certificate
- Comprehensive Major
- Undergraduate Certificate
- Master's Degree

Choose All That Apply:

- Bachelor of Arts
- Bachelor of Applied Science
- Bachelor of Fine Arts
- Bachelor of Social Work
- Bachelor of Music Education
- Bachelor of Music
- Bachelor of Science
- Bach of Science in Athl Traing
- Bach of Science in Education
- Bachelor of Science in Nursing

General Education Courses Required:

BIO 121(4), GLG 110(4), GRY 135(4), and PHY 123(4) or PHY 203(5)

Total Hours: 16-17

General Education Courses Recommended:

None

Total Hours: N/A

Requirements (including Admission) and Limitations for Specific Degree/Program:

Only course codes outside of the department of your major will count towards the minor:

- A. Foundational biology competencies: BIO 121*(4) and 122(4).
- B. Foundational chemistry competencies: CHM 160(4), 161(1), 170(3), and 171(1).
- C. Foundational geography and geology competencies: GLG 110*(4) and GRY 135*(4).
- D. Foundational physics and astronomy competencies: PHY 123*(4) or PHY 203*(5) and PHY 124 (4) or PHY 204 (5):
 - a. Those seeking earth science certification must additionally complete AST 115(4)
- E. Intellectual Foundations of Science and Technology: SCI 505(3)

*In the Natural World area of General education, BIO 121 will satisfy Life Sciences requirement while GLG 110, GRY 135, PHY 123, or PHY 203 will satisfy the Physical Sciences requirement. Some additional courses on the list may already be part of major degree requirements.

Total Hours: 36-38

Prerequisites for Required Courses:

BIO 121 General Biology I

Prerequisite: eligibility for both ENG 110 and MTH 135

Recommended Electives:

None

Total Hours: N/A

Limitations on Electives:

N/A

Please attach the following documents: (only one file may be attached for each requirement; accepts file types of PDF, DOC or DOCX)

1. Statement of Rationale: *Attached*

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2. Estimated costs for first five years: *Attached*

3. Complete catalog description (including new courses and course changes pending approval): *Attached*

4. CBHE Application (if applicable): *Not Attached*

*Note: For new programs requiring CBHE approval, CBHE forms NP, PS, and PG will satisfy #1 and CBHE form FP will satisfy #2.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/29/2017

Current Status:

College Council Review

Proposal Progress:

03/29/2017 - Submitted by Department Head (Toby Dogwiler)

03/29/2017 - Submitted by Department Head (Bryan Breyfogle)

03/29/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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Rationale

In the state of Missouri, there is a desperate need for high-school science teachers with in-depth content knowledge in their field of interest, but also foundational knowledge in the other biological and physical sciences. This minor works in conjunction with program changes put forth by the departments of Chemistry, GGP, and PAMS to offer students a clear path towards a degree that meets the requirements above. This minor does not include courses in teacher education that are required by the state of Missouri for certification as a teacher. Certification requirements can be met through post-baccalaureate programs or masters programs.

As an interdisciplinary minor that serves students from each of the departments mentioned above, there are a large number of courses explicitly listed within the program of study. However, it is important to note that the actual number of courses this program adds to a student's program of study is much smaller than it first appears. For example, as chemistry major, CHM 160(4), 161(1), 170(3), and 171(1) do not count towards the minor (they are excluded by the statement: "Only course codes outside of the department of your major will count towards the minor" – in fact they are required by the major). Additionally, PHY 123(4) or PHY 203(5) and PHY 124(4) or PHY 204(5) are required by the major. This means that BIO 121(4), BIO 122(4), GLG 110(4), GRY 135(4), and SCI 505(3) comprise the *additional* courses (5 courses, 19 hours) a chemistry major must take to obtain this minor. It is also important to note that BIO 121(4) can also fulfill the student's Life Sciences General Education requirement, while GLG 110(4), GRY 135(4), PHY 123(4), or PHY 203(5) will fulfill the Physical Science requirement.

Estimated costs for first five years

This minor provides a clear course of study for students interested in developing foundational knowledge in biological and physical sciences appropriate for pursuing post-baccalaureate certification to teach in the state of Missouri. The students that are served by this minor are already required to complete these courses in pursuit of certification to teach within the state of Missouri. For this reason, there will be no new costs incurred by implementation of this minor.

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Foundations of Interdisciplinary Science Minor:

This minor is designed for students preparing to enter post-graduate studies to become a high school science teacher. This minor does not include courses in teacher education that are required by the state of Missouri for certification as a teacher. Certification requirements can be met through post-baccalaureate programs or masters programs. Only course codes outside of the department of your major will count towards the minor:

- A. Foundational biology competencies: BIO 121*(4) and 122(4).
- B. Foundational chemistry competencies: CHM 160(4), 161(1), 170(3), and 171(1).
- C. Foundational geography and geology competencies: GLG 110*(4) and GRY 135*(4).
- D. Foundational physics and astronomy competencies: PHY 123*(4) or PHY 203*(5) and PHY 124 (4) or PHY 204 (5).
 - a. Those seeking earth science certification must additionally complete AST 115(4)
- E. Intellectual Foundations of Science and Technology: SCI 505(3)

*In the Natural World area of General education, BIO 121 will satisfy Life Sciences requirement while GLG 110, GRY 135, PHY 123, or PHY 203 will satisfy the Physical Sciences requirement. Some additional courses on the list may already be part of major degree requirements.

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Curricular Action Workflow

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Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/02/2017 by G Schick (AlanSchick@MissouriState.edu).

*All fields require input

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

CHM452 Biochemistry I

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 452 Biochemistry I

Prerequisite: "C-" or better in CHM 343 or CHM 344. Recommended Prerequisite: BIO 121 or BMS 110 and 111.

Structure and function of biomolecules: proteins, enzymes, nucleic acids, carbohydrates, lipids and membranes.

3(3-0) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → B I S

CHM 452 554 Biochemistry I

Prerequisite: "C-" or better in CHM 343 or CHM 344. Recommended Prerequisite: BIO 121 or BMS 110 and 111. Structure and function of biomolecules: proteins, enzymes, nucleic acids, carbohydrates, lipids and membranes. **CHM 352 and 554 cannot both be applied toward a chemistry major or minor. May be taught concurrently with CHM 654. Cannot receive credit for both CHM 554 and CHM 654.** 3(3-0) F, D

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

Biochem I (CHM 452) and Biochem Lab I (CHM 453) are being renumbered in order to create graduate-level parallel offerings for these courses, which also requires updating the course descriptions. Because the course numbers 652 and 653 are not available for the CHM course code, the undergraduate courses (CHM 452 and 453) are being renumbered to be consistent with the new graduate courses, CHM 654 and CHM 655. CHM 654 and CHM 655 are being submitted as new course proposals.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

College Council Review

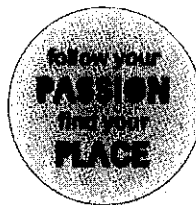
Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

Review Comments:

No comments have been added to this proposal.

[Redacted comment box]



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Missouri State

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Curricular Action WorkflowMissouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - Change Course Proposal Form**Change Course Proposal Form****Submitted on 03/02/2017 by G Schick (AlanSchick@MissouriState.edu).*****All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (s.g. permanent) SECTION of a variable content course.

Existing Course:

CHM453 Biochemistry Laboratory I

Will this proposal need to be reviewed by CGEIP? No YesWill this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 453 Biochemistry Laboratory I

Prerequisite: CHM 452 or concurrent enrollment. A series of multidimensional biochemical experiments designed to explore the biochemical literature, scientific report writing, and the biochemical techniques used to isolate and study biomolecules. CHM 353 and 453 cannot both be applied toward a chemistry major or minor. Supplemental course fee. 2(0-4) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → | **B I S**CHM 453 **555** Biochemistry Laboratory I

Prerequisite: CHM 452 **554** or concurrent enrollment. A series of multidimensional biochemical experiments designed to explore the biochemical literature, scientific report writing, and the biochemical techniques used to isolate and study biomolecules. CHM 353 and **452 555** cannot both be applied toward a chemistry major or minor. **May be taught concurrently with CHM 655. Cannot receive credit for both CHM 555 and CHM 655.** Supplemental course fee. 2(0-4) F, **D**

What is changing? Check all boxes that apply.

 Course Code Course Number (Check Availability) Title Prerequisite

- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

Biochem lab I (CHM 453) and the corresponding lecture course, Biochem I (CHM 452) are being renumbered in order to create graduate-level parallel offerings for these courses, which also requires updating the course descriptions. Because the course numbers 652 and 653 are not available for the CHM course code, the undergraduate courses (CHM 452 and 453) are being renumbered to be consistent with the new graduate courses, CHM 654 and CHM 655. CHM 654 and CHM 655 are being submitted as new course proposals. Periodicity is being expanded to allow for the option of offering more than once/year in years of high enrollment.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific): _____
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

College Council Review

Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

Review Comments:

No comments have been added to this proposal.



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Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/03/2017 by G Schick (AlanSchick@MissouriState.edu).

*All fields require input

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

CHM552 Biochemistry II

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 552 Biochemistry II

Prerequisite: "C-" or better in CHM 452. Bioenergetics--Metabolism of biomolecules including carbohydrates, lipids, amino acids and nucleotides. Photosynthesis. Nitrogen metabolism. Mechanisms of hormone action. May be taught concurrently with CHM 652. Cannot receive credit for both CHM 552 and CHM 652. 3(3-0) S

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → **B I S**

CHM ~~552~~ **556** Biochemistry II

Prerequisite: "C-" or better in CHM 452 ~~554~~. Bioenergetics--Metabolism of biomolecules including carbohydrates, lipids, amino acids and nucleotides. Photosynthesis. Nitrogen metabolism. Mechanisms of hormone action. May be taught concurrently with CHM ~~652~~ **656**. Cannot receive credit for both CHM ~~552~~ **556** and CHM ~~652~~ **656**. 3(3-0) S, D

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

Biochem II (CHM 552) and Biochem Lab II (CHM 553), along with their parallel courses (CHM 652 and 653, respectively), are being renumbered to maintain sequential consistency with the Biochem I offerings that are changing course numbers to become CHM 554 (lec) and CHM 555 (lab). A complete renumbering of the main biochemistry sequence is necessary to create parallel 600-level offerings for the Biochem I courses (lec and lab -- see other Change Course and New Course proposal forms). Also, enrollments in biochemistry have grown over recent years, so the periodicity of "On Demand" is being added to "Spring" to allow offering flexibility in years of high enrollment.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

College Council Review

Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

Review Comments:

No comments have been added to this proposal.



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Curricular Action Workflow



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Change Course Proposal Form

Submitted on 03/03/2017 by G Schick (AlanSchick@MissouriState.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

CHM652 Biochemistry II

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 652 Biochemistry II

Prerequisite: "C-" or better in CHM 452. Bioenergetics--Metabolism of biomolecules including carbohydrates, lipids, amino acids and nucleotides. Photosynthesis. Nitrogen metabolism. Mechanisms of hormone action. May be taught concurrently with CHM 552. Cannot receive credit for both CHM 552 and CHM 652. 3(3-0) S

Revise the current online catalog description as needed: (Strike through all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → | **B I S**

CHM ~~652~~ **656** Biochemistry II

Prerequisite: "C-" or better in CHM 452 ~~554~~ or **CHM 654**. Bioenergetics--Metabolism of biomolecules including carbohydrates, lipids, amino acids and nucleotides. Photosynthesis. Nitrogen metabolism. Mechanisms of hormone action. May be taught concurrently with CHM ~~552~~ **556**. Cannot receive credit for both CHM ~~552~~ **556** and CHM ~~652~~ **656**. 3(3-0) S, **D**

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

Biochem II (CHM 652) and Biochem Lab II (CHM 653), along with their parallel courses (CHM 552 and 553, respectively), are being renumbered to maintain sequential consistency with the Biochem I offerings that are changing course numbers to become CHM 554 (lec) and CHM 555 (lab). A complete renumbering of the main biochemistry sequence is necessary to create parallel 600-level offerings for the Biochem I courses (lec and lab -- see other Change Course and New Course proposal forms). Also, enrollments in biochemistry have grown over recent years, so the periodicity of "On Demand" is being added to "Spring" to allow offering flexibility in years of high enrollment.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

Grad Council Review

Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

03/07/2017 - Reviewed by Dean (Tamera Jahnke)

Review Comments:

No comments have been added to this proposal.



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9

Missouri State

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/03/2017 by G Schick (AlanSchick@MissouriState.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

CHM553 Advanced Biochemistry Laboratory

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 553 Advanced Biochemistry Laboratory

Prerequisite: CHM 453; and CHM 552 or concurrent enrollment. Emphasis on modern techniques in the biochemistry laboratory; enzymology, protein purification and analysis; protein structure determination; isoelectric focusing; HPLC; trace techniques. Supplemental course fee. May be taught concurrently with CHM 653. Cannot receive credit for both CHM 553 and CHM 653. 2(0-4) D

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → **B I S**

CHM 553 **557** Advanced Biochemistry Laboratory **II**

Prerequisite: CHM 453 **555**; and CHM 552 **556** or concurrent enrollment. Emphasis on modern techniques in the biochemistry laboratory; enzymology, protein purification and analysis; protein structure determination; isoelectric focusing; HPLC; trace techniques. Supplemental course fee. May be taught concurrently with CHM 653 **657**. Cannot receive credit for both CHM 553 **557** and CHM 653 **657**. 2(0-4) D

What is changing? Check all boxes that apply.

Course Code Course Number (Check Availability) Title Prerequisite

- Credit Hours/Contact Hours Periodicity Description

Reason for proposed change

Biochem II (CHM 552) and Biochem Lab II (CHM 553), along with their parallel courses (CHM 652 and 653, respectively), are being renumbered to maintain sequential consistency with the Biochem I offerings that are changing course numbers to become CHM 554 (lec) and CHM 555 (lab) and adding new graduate parallel courses, CHM 654 (lec) and CHM 655 (lab). Additionally, updates to course titles and descriptions are being made accordingly.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum Faculty Input Student Input
- Accreditation/certification compliance Review of catalog information
- Other (be specific): _____
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

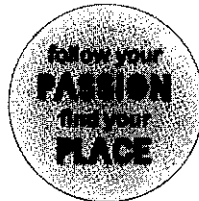
College Council Review

Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

Review Comments:

No comments have been added to this proposal.



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Missouri State.

10

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/03/2017 by G Schick (AlanSchick@MissouriState.edu).

***All fields require input**
 This proposal applies to:

An existing COURSE

An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:
 CHM653 Advanced Biochemistry Laboratory

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CHM 653 Advanced Biochemistry Laboratory

Prerequisite: CHM 453; and CHM 552 or CHM 652 or concurrent enrollment in CHM 552 or CHM 652. Emphasis on modern techniques in the biochemistry laboratory; enzymology; protein purification and analysis; protein structure determination; isoelectric focusing; HPLC; trace techniques. Supplemental course fee. May be taught concurrently with CHM 553. Cannot receive credit for both CHM 553 and CHM 653. 2(0-4) D

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → | **B I S**

CHM ~~653~~ **657** Advanced Biochemistry Laboratory **II**

Prerequisite: CHM ~~453~~ **555** or CHM ~~655~~ **555**; CHM ~~552~~ **556** or CHM ~~652~~ **656** or concurrent enrollment. Emphasis on modern techniques in the biochemistry laboratory; enzymology; protein purification and analysis; protein structure determination; isoelectric focusing; HPLC; trace techniques. Supplemental course fee. May be taught concurrently with CHM ~~553~~ **557**. Cannot receive credit for both CHM ~~553~~ **557** and CHM ~~653~~ **657**. 2(0-4) D

What is changing? Check all boxes that apply.

- Course Code Course Number (Check Availability) Title Prerequisite

Credit Hours/Contact Hours Periodicity Description

Reason for proposed change

Biochem II (CHM 652) and Biochem Lab II (CHM 653), along with their parallel courses (CHM 552 and 553, respectively), are being renumbered to maintain sequential consistency with the Biochem I offerings that are changing course numbers to become CHM 554 (lec) and CHM 555 (lab) and adding new graduate parallel courses, CHM 654 (lec) and CHM 655 (lab). Additionally, updates to course titles and descriptions are being made accordingly.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

Grad Council Review

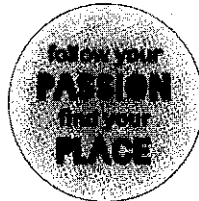
Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

03/07/2017 - Reviewed by Dean (Tamera Jahnke)

Review Comments:

No comments have been added to this proposal.



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11

Missouri State

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/29/2017 by Matthew Siebert (MSiebert@MissouriState.edu).

Department:

Chemistry

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Chemistry-BS-Minor Required

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Chemistry (Non-Comprehensive)

Bachelor of Science

A. General Education Requirements - see General Education Program and Requirements section of catalog

B. Major Requirements

1. CHM 160(4), 161(1), 170(3), 171(1), 302(5), 342(5), 349(5), 375(3), 398(1)*, CHM 505(4) or 506(3) and CHM 507(3) and 508(2); 492(0), 498(1)*, 502(4); and one hour from CHM 397* or 399**

2. Chemistry electives from one of the following categories:

a. For a basic chemistry program without a specific area of emphasis, at least eight hours from CHM 352(3), 376(2), 399** or 499(1-3)*, 460(3) or 461(3), 509(2)

b. For students with a strong interest in environmental chemistry: CHM 460(3), 461(3), 462(2)

c. For students with a strong interest in biochemistry or pre-medicine: CHM 452(3), 453(2), 552(3), 553(2)

d. For a specific area of interest not included in categories a, b, or c: at least nine hours of chemistry courses numbered greater than 300 selected in consultation with the student's academic advisor and approved by the department head.

3. Public Affairs Capstone Experience will be fulfilled by completion of CHM 398 and 498(2); and CHM 397 or 399 or 499(1)

4. Related science and mathematics requirements:

a. MTH 261** and 280(10) or MTH 261*** and 288(8) or MTH 287 and 288(6)

b. PHY 123*** and 124(8) or PHY 203*** and 204(10)

*Will also count toward the Public Affairs Capstone Experience requirement

**If using CHM399 to fulfill B.1. and B.2.a. Any hours of CHM399 used to fulfill B.2.a. are in addition to B.1.

***Will also count toward General Education requirements

C. Minor Required (or second major)

D. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → **B I S**

11

Chemistry (Non-Comprehensive)

Bachelor of Science

A. General Education Requirements - see General Education Program and Requirements section of catalog

B. Major Requirements

1. CHM 160(4), 161(1), 170(3), 171(1), 302(5), 342(5), 343(5), 375(3), 398(1)*; CHM 505(4) or 506(3) and CHM 507(3) and 508(2); 492(0), 498(1)*, 502(4); and one hour from CHM 397* or 399*,**

2. Chemistry electives from one of the following categories:

a. For a basic chemistry program without a specific area of emphasis, at least eight hours from CHM 352(3), 376(2), 399*,** or 499(1-3)*, 460(3) or 461(3), 509(2)

b. For students with a strong interest in environmental chemistry: CHM 460(3), 461(3), 462(2)

c. For students with a strong interest in biochemistry or pre-medicine: CHM 452(3), 453(2), 552(3), 553(2)

d. For students with a strong interest in education: CHM 352(3), 435(1), 460(3), and 462(2). Students interested in pursuing certification for high school science teaching should declare a Foundations of Interdisciplinary Science minor.

e. For a specific area of interest not included in categories a, b, or c: at least nine hours of chemistry courses numbered greater than 300 selected in consultation with the student's academic advisor and approved by the department head.

3. Public Affairs Capstone Experience will be fulfilled by completion of CHM 398 and 498(2); and CHM 397 or 399 or 499(1)

4. Related science and mathematics requirements:

a. MTH 261*** and 280(10) or MTH 261*** and 288(8) or MTH 287 and 288(6)

b. PHY 123*** and 124(8) or PHY 203*** and 204(10)

*Will also count toward the Public Affairs Capstone Experience requirement

**If using CHM399 to fulfill B.1. and B.2.a.: Any hours of CHM399 used to fulfill B.2.a. are in addition to B.1.

***Will also count toward General Education requirements

C. Minor Required (or second major)

D. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Total Hours: unchanged

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Other

Added track/option.

Reason for Proposed Change:

This new track, along with the new minor "Foundations of Interdisciplinary Science", provides basic science content competencies for students preparing to enter post-graduate studies to become a high school science teacher. This track does not include courses in teacher education that are required by the state of Missouri for certification as a teacher. Certification requirements can be met through post-baccalaureate programs or masters programs.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/29/2017

Current Status:

College Council Review

Proposal Progress:

03/29/2017 - Submitted by Department Head (Bryan Breyfogle)

Review Comments:

No comments have been added to this proposal.



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12

Missouri State

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - New Course Proposal Form

New Course Proposal Form

Submitted on 03/02/2017 by G Schick (AlanSchick@MissouriState.edu).

*All fields require input

- New COURSE
- New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code: CHM Course Number: (Check Availability) 654

Course Title: Biochemistry I

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter None: C- or better in CHM 343 or CHM 344. Recommended Prerequisite: BIO 121 or BMS 110 and 111.

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)
 Structure and function of biomolecules: proteins, enzymes, nucleic acids, carbohydrates, lipids and membranes.
 May be taught concurrently with CHM 554. Cannot receive credit for both CHM 554 and CHM 654.

Credit Hours: 3 Lecture Contact Hours: 3 Lab Contact Hours: 0

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.

- Fall Fall (even-numbered years only) Fall (odd-numbered years only)
- Spring Spring (even-numbered years only) Spring (odd-numbered years only)

Summer On Demand only

Complete Catalog Description:

CHM 654 Biochemistry I

Prerequisite: "C-" or better in CHM 343 or CHM 344. Recommended Prerequisite: BIO 121 or BMS 110 and 111.

Structure and function of biomolecules: proteins, enzymes, nucleic acids, carbohydrates, lipids and membranes. May be taught concurrently with CHM 554. Cannot receive credit for both CHM 554 and CHM 654.

Credit hours: 3 Lecture contact hours: 3 Lab contact hours: 0

Typically offered: Fall, On Demand only

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Attached.

Attached

Purpose of Course

The specific purpose of this course is to give interested graduate students access to the first-semester content of our biochemistry sequence (both lecture and lab) if they have not previously taken biochemistry. Currently, graduate-level access is available to only the second-semester content, but it is common at universities to allow graduate students to take both semesters at the graduate level.

Relationship to Other Departments

No other department offers this course. We expect some students from other departments (primarily Biology and/or Biomolecular Sciences) to enroll in this course.

Is there a graduate/undergraduate parallel course to this one? No Yes

Enter parallel course number

CHM452 Biochemistry I

How do these classes differ?

Note: CHM 452 is being changed to CHM 554. Differences between CHM 654 and CHM 554 entail expanded special projects, for which CHM 654 students are given higher expectations in terms of understanding and the use of current scientific literature. See the attached course syllabus for details.

New Course Resource Information

Anticipated Average Enrollment per section:

6

Maximum Enrollment Limit per section:

10

Anticipated Average Enrollment per semester:

6

Maximum Enrollment Limit per semester:

10

Anticipated Average Enrollment per year:

5

Maximum Enrollment Limit per year:

10

Faculty Load Assignment (equated hours):

0

Is another course being deleted? No Yes

12

What will this course require in the way of:

Additional library Holdings

none.

Additional computer resources

none.

Additional or remodeled facilities

none.

Additional equipment or supplies

none.

Additional travel funds

none.

Additional faculty; general vs specialized

none.

Additional faculty; regular vs per-course

none.

Other additional expenses

none.

If additional faculty are not required, how will faculty be made available to teach this course?

The workload for this course will be integrated into that for the (existing) undergraduate parallel course.

List names of current faculty qualified and available to teach this course

Cuebas
Fichter
Yoshimatsu

What is the anticipated source of students for this course?

Chemistry graduate students who are interested in a biochemistry emphasis but who have not taken an equivalent course as an undergraduate.

If from within the department, will students be taking this course in addition to or in place of other courses?

In place of other courses.

If from outside the department, which courses in other departments would most likely be affected?

We expect some students from other departments (primarily Biology and/or Biomolecular Sciences) to enroll in this course. Since biochemistry is similar to "molecular biology" it is possible that enrollments in such courses in BIO and BMS would be affected, but students often take both biochemistry and molecular biology as part of their curricula, so the effects would likely be negligible.

Other comments:

none

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

Grad Council Review

Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

03/07/2017 - Reviewed by Dean (Tamera Jahnke)

Review Comments:

No comments have been added to this proposal.



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CHM 554/654: BIOCHEMISTRY I

Fall 2017

Dr. Katye Fichter

Office: 419 Temple; E-mail: kfichter@missouristate.edu

Office Hours: F 3:30-4:30 pm & by appointment

Please note: Emails will not be answered 24 hours before an exam. Please prepare accordingly.

This course is the first semester of an intensive 2-semester survey of intermediate biochemistry. The course begins with a review of the chemical basics of life, (e.g., the chemistry of water, buffer solutions and bonding). Afterwards we will focus on the four classes of biomolecules: proteins, nucleic acids, carbohydrates, and lipids. We will cover the structure and function of proteins and nucleic acids in depth, and investigate how the cell uses macromolecular structures as molecular machines.

CHM 554 will present a poster from an assigned topic as a team to the class; the poster grade will be assigned by peer-review from the students in the course

CHM 654 will present a poster in a similar format to students enrolled in CHM 554. However, these posters will be finished individually on a research topic related to the course work, approved by the instructor, and include significant peer-reviewed article reference.

Required Text: Fundamentals of Biochemistry: Life at the Molecular Level (4th ed), by Voet, Voet, and Pratt. You should come to class with the material to be discussed already read; plan to **devote at least 5 hours/week** to reading your textbook in order to stay current with the lecture material.

Supplemental Reading: Each student is responsible for accessing blackboard to obtain supplemental reading and assignments.

Grade Breakdown:

	quantity	points each	total points	% points
quizzes	5	25	125	16.1
poster project: presentation	1	100	100	12.9
poster project: evaluations	5	10	50	6.5
research article homework	2	25	50	6.5
exams	3	100	300	38.7
final	1	150	150	19.4
		total	775	100.0

*Evaluations from each session will be worth 10 points total, regardless of the number of posters evaluated that session.

Each student's point total will be converted into a letter grade using the following point scale:

A	93-100%	C+	77-79%
A-	90-92%	C	73-76%
B+	87-89%	C-	70-72%
B	83-86%	D+	67-69%
B-	80-82%	D	65-66%
		F	0-64%

Exams: Three interim exams (100 points each) and a final exam (150 points) will be given. Material for the exams will be derived from both the textbook and the lecture. ***Do not expect to do well on exams if you haven't read the textbook!*** Test dates have been **tentatively** specified in the schedule assist you in planning your studies for the semester.

Poster Project:

CHM 554: Teams of 2 students will pair together to complete a poster project. You must report your poster team by the date specified on the schedule. Afterwards, your team will be assigned a project and presentation date.

- The grade for your presentation will be calculated as an average grade from your peers (classmates). This grading format is intended to familiarize you with the concept of peer review. Each member of the team will be assigned the same grade. *See accompanying documents on BlackBoard for the details on preparing your poster!*
- Dr. Fichter will grade evaluations forms used by classmates to review posters. Download copies of this form from blackboard and bring them with you to the presentations. Evaluations from each session will be worth 10 points total, regardless of the number of posters evaluated that session. You must demonstrate that you participated in a conversation with poster authors to receive all points on your evaluation forms!

Poster presentations will take place in the 4th floor hallway of Temple near the elevator.

Your poster will be displayed publically for at least one week.

CHM 654: Students enrolled in CHM 654 will complete a poster individually on a research topic that is relevant to the course. Topics must be approved by the instructor, and the student must use at least 5 peer-reviewed journal articles in the poster. Other guidelines follow those as stated for CHM 554 posters.

Quizzes: Five short quizzes, worth 25 points each, will be given throughout the semester, worth a total of 125 points. Some quizzes are scheduled (see the schedule below for the *tentative* schedule for quizzes) and the rest are unannounced. You must be present in class to take a quiz. If you are late to class you will not get any additional time to take the quiz. Quizzes may not be re-taken if you are absent from class; you will simply be assigned a 0. These quizzes are designed to be fairly easy if you attend class regularly and keep up with the reading assignments.

Research Articles: One current research article will be assigned for you to read and homework will be given for you to turn in the day of the discussion. Research article homework should be typed and printed (do not email)! This is designed to familiarize yourself with current biochemical research and the language of research scientists. Homework not turned in on, or before, the due date will be assigned a 0.

Late Assignments: The *tentative* schedule for assignment due dates is noted on the schedule below and will be updated in class as necessary. *Assignments which are late will not be graded and receive a score of 0.*

Attendance: Regular attendance and active participation during lecture is strongly encouraged. Attendance will not be checked on a regular basis per se, but absences will undoubtedly diminish your performance. *It is your responsibility to obtain any and all information missed due to an absence from a fellow class member.*

Make-up Exams: No make-up exams will be given. If a single interim exam is missed due to an excused absence, the score of your other 2 exams will be averaged to generate a score for your missed exam. Unfortunately, any other missed exams will receive a zero grade.

Academic Dishonesty: I consider plagiarism/cheating/dishonesty to be **extreme offenses** and these will be dealt with in a very serious manner. Sanctions may include a grade of 0 on any graded material, a formal report filed in your academic record and/or a grade of XF (failure due to academic dishonesty). You must sign the academic dishonesty contract before participating in any class activities.

Missouri State University is a community of scholars committed to developing educated persons who accept the responsibility to practice personal and academic integrity. You are responsible for knowing and following the university's student honor code, Student Academic Integrity Policies and Procedures (found at http://www.missouristate.edu/policy/Op3_01_AcademicIntegrityStudents.htm) and also available at the Reserves Desk in Meyer Library. Any student participating in any form of academic dishonesty will be subject

to sanctions as described in this policy.

Nondiscrimination: Missouri State University is an equal opportunity/affirmative action institution, and maintains a grievance procedure available to any person who believes he or she has been discriminated against. At all times, it is your right to address inquiries or concerns about possible discrimination to the Office for Institutional Equity and Compliance, Park Central Office Building, 117 Park Central Square, Suite 111, (417) 836-4252. Other types of concerns (i.e., concerns of an academic nature) should be discussed directly with your instructor and can also be brought to the attention of your instructor's Department Head. Please visit the OED website at www.missouristate.edu/equity/.

Disability Accommodation: To request academic accommodations for a disability, contact the Director of the Disability Resource Center, Plaster Student Union, Suite 405, (417) 836-4192 or (417) 836-6792 (TTY), www.missouristate.edu/disability. Students are required to provide documentation of disability to the Disability Resource Center prior to receiving accommodations. The Disability Resource Center refers some types of accommodation requests to the Learning Diagnostic Clinic, which also provides diagnostic testing for learning and psychological disabilities. For information about testing, contact the Director of the Learning Diagnostic Clinic, (417) 836-4787, <http://psychology.missouristate.edu/ldc>.

Cell Phone Policy: As a member of the learning community, each student has a responsibility to other students who are members of the community. When cell phones or pagers ring and students respond in class or leave class to respond, it disrupts the class. Therefore, the Office of the Provost prohibits the use by students of cell phones, pagers, PDAs, or similar communication devices during scheduled classes. All such devices must be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Other exceptions to this policy may be granted at the discretion of the instructor.

Dropping a Class: It is your responsibility to understand the University's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade and will also be financially obligated to pay for the class. For information about dropping a class or withdrawing from the university, contact the Office of the Registrar at 836-5520.

Audio and Video Recording of Course Activity: Students are not permitted to make audio or video recordings of course activity.

Emergency Response Statement:

At the first class meeting, students should become familiar with a basic emergency response plan through a dialogue with the instructor that includes a review and awareness of exits specific to the classroom and the location of evacuation centers for the building. All instructors are provided this information specific to their classroom and/or lab assignments in an e-mail prior to the beginning of the fall semester from the Office of the Provost and Safety and Transportation. Students with disabilities impacting mobility should discuss the approved accommodations for emergency situations and additional options when applicable with the instructor. For more information, go to <http://www.missouristate.edu/safetran/51597.htm> and <http://www.missouristate.edu/safetran/erp.htm>.

Shelter Information, Temple Hall

- Evacuate fourth floor.
Basement lecture areas or lower level interior labs and classrooms.

Evacuation Information; Temple Hall:

- North to Meyer Library; (Alternate: Northwest to Glass Hall and West to Kemper Hall. Destination will be determined by type of emergency and weather condition.)

Missouri State.

13

Curricular Action WorkflowMissouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - New Course Proposal Form**New Course Proposal Form****Submitted on 03/02/2017 by G Schick (AlanSchick@MissouriState.edu).*****All fields require input**

- New COURSE
- New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code:

CHM

Course Number: (Check Availability)

655

Course Title:

Biochemistry Laboratory I

Will this proposal need to be reviewed by CGEIP? No YesWill this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter 'None':

CHM 554 or CHM 654 or concurrent enrollment.

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)

A series of multidimensional biochemical experiments designed to explore the biochemical literature, scientific report writing, and the biochemical techniques used to isolate and study biomolecules. May be taught concurrently with CHM 555. Cannot receive credit for both CHM 555 and CHM 655.

Credit Hours:

2

Lecture Contact Hours:

0

Lab Contact Hours:

4

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.

- Fall Fall (even-numbered years only) Fall (odd-numbered years only)

- Spring
- Spring (even-numbered years only)
- Spring (odd-numbered years only)
- Summer
- On Demand only

Complete Catalog Description:

CHM 655 Biochemistry Laboratory I

Prerequisite: CHM 554 or CHM 654 or concurrent enrollment.

A series of multidimensional biochemical experiments designed to explore the biochemical literature, scientific report writing, and the biochemical techniques used to isolate and study biomolecules. May be taught concurrently with CHM 555. Cannot receive credit for both CHM 555 and CHM 655.

Credit hours: 2 Lecture contact hours: 0 Lab contact hours: 4

Typically offered: Fall, On Demand only

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Attached. Attached

Purpose of Course

The specific purpose of this course is to give interested graduate students access to the first-semester content of our biochemistry sequence (both lecture and lab) if they have not previously taken biochemistry. Currently, graduate-level access is available to only the second-semester content, but it is common at universities to allow graduate students to take both semesters at the graduate level.

Relationship to Other Departments

No other department offers this course. We expect very few students from other departments, but it is possible - primarily Biology and/or Biomolecular Sciences.

Is there a graduate/undergraduate parallel course to this one? No Yes

Enter parallel course number

CHM453 Biochemistry Laboratory I

How do these classes differ?

Note: CHM 453 is being changed to CHM 555. Differences between CHM 655 and CHM 555 entail a special project, for which CHM 654 students are assigned a laboratory method to be researched and presented in class, with emphasis on experimental design and the use of current scientific literature. See the attached course syllabus for details.

New Course Resource Information

Anticipated Average Enrollment per section:	2	Maximum Enrollment Limit per section:	6
Anticipated Average Enrollment per semester:	2	Maximum Enrollment Limit per semester:	6
Anticipated Average Enrollment per year:	2	Maximum Enrollment Limit per year:	6
Faculty Load Assignment (equated hours):	4		

Is another course being deleted? No Yes

13

What will this course require in the way of:

Additional library Holdings

none

Additional computer resources

none

Additional or remodeled facilities

none

Additional equipment or supplies

none

Additional travel funds

none

Additional faculty; general vs specialized

none

Additional faculty; regular vs per-course

none

Other additional expenses

none

If additional faculty are not required, how will faculty be made available to teach this course?

The workload for this course will be integrated into that for the (existing) undergraduate parallel course.

List names of current faculty qualified and available to teach this course

Cuevas
Fichter
Yoshimatsu

What is the anticipated source of students for this course?

Chemistry graduate students who are interested in a biochemistry emphasis but who have not taken an equivalent course as an undergraduate.

If from within the department, will students be taking this course in addition to or in place of other courses?

In place of other courses.

If from outside the department, which courses in other departments would most likely be affected?

We expect very few students from other departments (primarily Biology and/or Biomolecular Sciences) to enroll in this course, but it is possible. They are more like to enroll in the lecture course (CHM 654) without taking this corresponding lab course.

Other comments:

none.

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

09/20/2016

Current Status:

Grad Council Review

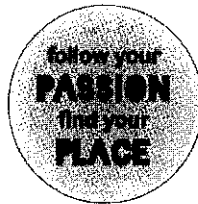
Proposal Progress:

03/03/2017 - Submitted by Department Head (Bryan Breyfogle)

03/07/2017 - Reviewed by Dean (Tamera Jahnke)

Review Comments:

No comments have been added to this proposal.

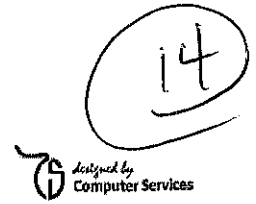


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Missouri State

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Kevin Mickus (Kevinmickus@missouristate.edu).

Department:

Geography, Geology, & Planning

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Geology-BS-Minor Required

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)

- Course changes of under 18 hours
- From program (major) to option
- Other
- Course changes of 18 hours or more

Reason for Proposed Change:

We are reducing the total credits required for the degree program and streamlining the requirements, based on input from faculty, students, and comparison to programs at peer-institutions.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/06/2017

Current Status:

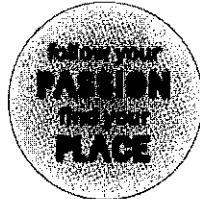
College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

03/31/2017 - Department Head Review - Toby Dogwiler - The proposed changes will make navigating our major requirements simpler for our students and increases our staffing flexibility.



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Geology (Non-Comprehensive)

Bachelor of Science

- A. General Education Requirements - see General Education Program and Requirements section of catalog
- B. Major Requirements (49-54 hours)
 - 1. GLG 110(4) or both GLG 171(3) and GLG 172(1); GLG 314(4), 332(4), 333(3), 334(3), 340(4), 358(3), 570(3)
 - 2. GLG 412(4) or 413(6) or equivalent Field Geology course
 - 3. CHM 160(4)
 - 4. MTH 138(5) or 181(3)
 - 5. GRY 363(4)
 - 6. Complete 6 hours selected from:
 - A. CHM 161(1), 170(3), 171(1)
 - B. GLG courses numbered 318 or higher, but not to include more than 4 hours of GLG 360
 - C. GRY 348(3)
 - 7. Public Affairs Capstone Experience will be fulfilled by completion of GLG 358(3).
- C. Minor Required (or second major). Geology majors wishing to emphasize paleontology should minor in biology.
- D. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

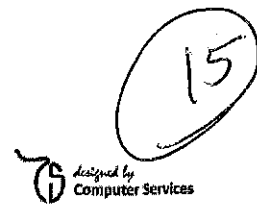
Geology (Non-Comprehensive)

Bachelor of Science

- A. General Education Requirements - see General Education Program and Requirements section of catalog
- B. Major Requirements (49-54 **45** hours)
 - 1. GLG 110(4) or both GLG 171(3) and GLG 172(1); GLG 314(-4 3), 332(4 3), 333(3), 334(3), 340(4), 358(3), 570(3)
 - 2. GLG 412(4) or 413(4-6) or equivalent Field Geology course
 - 3. **Complete 3 hours from GLG courses numbered 318 or higher**
 - 4. **Complete 3 hours from GLG courses numbered 400 or higher**
 - 5. CHM 160(4), 161(1)
 - 6. MTH 138(5), or 181(3), or 287(3)
 - 7. GRY 363(4)
 - 8. ~~Complete 6 hours selected from:~~
 - A. CHM 161(1), 170(3), 171(1)
 - B. ~~GLG courses numbered 318 or higher, but not to include more than 4 hours of GLG 360~~
 - C. GRY 348(3)
 - 9. Public Affairs Capstone Experience will be fulfilled by completion of GLG 358(3).
- C. Minor Required (or second major). Geology majors wishing to emphasize paleontology should minor in biology.
- D. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Kevin Mickus (Kevinmickus@missouristate.edu).

Department:

Geography, Geology, & Planning

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Geology-BS

Current Catalog Description: (Either cut and paste present description from online catalog OR provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [striketrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] OR provide as an attachment below)

← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other

- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

Reducing the number of credits required for the degree program based on feedback from faculty, students, and comparison of requirements to programs at peer institutions. Making the curricular choices more flexible for students, particularly the field geology options.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/06/2017

Current Status:

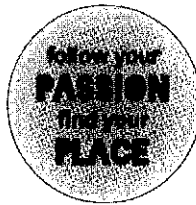
College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

03/31/2017 - Department Head Review - Toby Dogwiler - These changes streamline the pathway to graduation for our majors and provide us with more flexibility in staffing and offering courses.



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Geology (Comprehensive)

Bachelor of Science

This degree program is designed for those who wish to seek admission to graduate school in geology or related fields.

A. General Education Requirements - see General Education Program and Requirements section of catalog

B. Major Requirements (79-87 hours)

1. GLG 110(4) or both GLG 171(3) and GLG 172(1); GLG 314(4), 332(4), 333(3), 334(3), 340(4), 358(3), 412(4), 413(6) or equivalent Field Geology course, 570(3)
2. GLG 415(4) or 580(3) or GRY 348(3)
3. GLG 572(3) or 573(3) or 590(3)
4. Select a minimum of 8 additional hours of GLG courses numbered 318 or higher, but not to include more than 4 hours of GLG 360
5. Related Requirements (27-33 hours): GRY 363(4); CHM 160(4), 161(1), 170(3), 171(1); MTH 261(5) or 287(3); MTH 280(5) or 288(3); PHY 123(4) and 124(4), or PHY 203(5) and 204(5)
6. Public Affairs Capstone Experience will be fulfilled by completion of GLG 358(3).

C. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Geology (Comprehensive)

Bachelor of Science

This degree program is designed for those who wish to seek admission to graduate school in geology or related fields.

A. General Education Requirements - see General Education Program and Requirements section of catalog

B. Major Requirements (79-87 **65-69** hours)

1. GLG 110(4) or both GLG 171(3) and GLG 172(1); GLG 314(-4 3), 332(-4 3), 333(3), 334(3), 340(4), 358(3), 412(4), 413(6) or equivalent Field Geology course; 570(3)
2. ~~GLG 415(4) or 580(3) or GRY 348(3)~~
3. ~~GLG 572(3) or 573(3) or 590(3)~~
4. **Complete 6 hours from GLG 412 or GLG 413. Field courses transferred from another university must be pre-approved by the Geology faculty.**
5. Select a minimum of **8 10** additional hours of GLG courses numbered 318 or higher, **with at least 6 of these hours from GLG courses number 400 or higher.** ~~but not to include more than 4 hours of GLG 360~~
6. ~~Related Requirements (27-33 hours): GRY 363(4); CHM 160(4), 161(1), 170(3), 171(1); MTH 261(5) or 287(3); MTH 280(5) or 288(3); PHY 123(4) and 124(4), or PHY 203(5) and 204(5)~~
7. **GRY 363(4)**
8. **CHM 160(4), 161(1), PHY 123(4) or 203(5), MTH 261(5) or 287(3)**
9. **Complete 7 to 10 hours of courses from two of the following groups:**
 - a. **CHM 170(3) and CHM 171(1)**
 - b. **PHY 124(4) or 204(5)**
 - c. **MTH 280(5) or 288(3)**
10. **Public Affairs Capstone Experience will be fulfilled by completion of GLG 358(3).**

C. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/31/2017 by Kevin Mickus (Kevinmickus@missouristate.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

GLG314 Historical Geology

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

GLG 314 Historical Geology

Prerequisite: GLG 110 or both GLG 171 and GLG 172. Geological history of the earth with emphasis on North America; origin and evolution of animal and plant life on earth. One Saturday field trip required. 4(3-3) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → | **B** *I* ~~S~~

GLG 314 Historical Geology

Prerequisite: GLG 110 or both GLG 171 and GLG 172. Geological history of the earth with emphasis on North America; origin and evolution of animal and plant life on earth. One Saturday field trip required. ~~4(3-3) F~~ **3(2-2) F**

What is changing? Check all boxes that apply.

- | | | | |
|--|---|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> Course Code | <input type="checkbox"/> Course Number (Check Availability) | <input type="checkbox"/> Title | <input type="checkbox"/> Prerequisite |
| <input checked="" type="checkbox"/> Credit Hours/Contact Hours | <input type="checkbox"/> Periodicity | <input type="checkbox"/> Description | |

Reason for proposed change

We are reducing the contact hours in this course as part of a larger revision to the Geology Comprehensive and Non-Comprehensive degree requirements. We are trying to reduce our Geology requirements to be in line with peer programs at other institutions and streamline the pathway to graduation for our majors. The course outline and topics covered will remain the same, but the lectures and lab exercises will be more concise.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

03/06/2017

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

No comments have been added to this proposal.



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Missouri State.

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Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/31/2017 by Kevin Mickus (Kevinmickus@missouristate.edu).

*All fields require input

This proposal applies to:

- An existing COURSE
An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

GLG332 Mineralogy

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

GLG 332 Mineralogy

Prerequisite: GLG 110 or both GLG 171 and GLG 172; and CHM 160; and MTH 135 or MTH 138 or MTH 261 or MTH 287.

Origin, classification, description, and identification of ore minerals and rock-forming minerals. 4(2-4) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

Rich text editor with B I S buttons and revised text: GLG 332 Mineralogy. Prerequisite: GLG 110 or both GLG 171 and GLG 172; and CHM 160; and MTH 135 or MTH 138 or MTH 261 or MTH 287. Origin, classification, description, and identification of ore minerals and rock-forming minerals. 4(2-4) 3(2-2) F

What is changing? Check all boxes that apply.

- Course Code, Course Number (Check Availability), Title, Prerequisite, Credit Hours/Contact Hours, Periodicity, Description

Reason for proposed change

We are reducing the contact hours in this course as part of a larger revision to the Geology Comprehensive and Non-Comprehensive degree requirements. We are trying to reduce our Geology requirements to be in line with peer programs at other institutions and streamline the pathway to graduation for our majors. The course outline and topics covered will remain the same, but the lectures and lab exercises will be more concise.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

03/06/2017

Current Status:

College Council Review

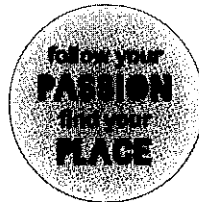
Proposal Progress:

03/31/2017 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

No comments have been added to this proposal.

[Redacted comment box]



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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 03/30/2017 by Kevin Mickus (Kevinmickus@missouristate.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

GLG794 Global Tectonics

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

GLG 794 Global Tectonics

Recommended Prerequisite: GLG 314. The fundamental basis of plate tectonics. Topics covered include geophysical methods, plate motion theory, fundamental properties of plate boundaries, formation of sedimentary basins and orogenic belts. 3(3-0) S

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → B I S

GLG 794 Global Tectonics

Recommended Prerequisite: GLG 314. The fundamental basis of plate tectonics. Topics covered include geophysical methods, plate motion theory, fundamental properties of plate boundaries, formation of sedimentary basins and orogenic belts. 3(2-2 3-0) S

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

The class needs in class time to perform labs including locating and analyzing earthquakes, creating plate motion maps, doing paleomagnetic analyzes, isostatic analysis, analyzing isotopic data

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Accreditation/certification compliance
- Other (be specific):
- Check if this is a non-substantive change.
- Faculty Input
- Student Input
- Review of catalog information

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

03/06/2017

Current Status:

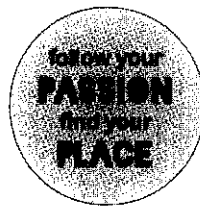
Dean Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

03/31/2017 - Department Head Review - Toby Dogwiler - Dr. Mickus is updating the contact hour distribution on this course to better reflect the hands-on nature of his pedagogical approach and the nature of the topic being covered.



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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Rebecca Baker (Beckybak@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Physics/Astronomy and Astrophysics:BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)

- Course changes of under 18 hours
- From program (major) to option
- Other
- Course changes of 18 hours or more

Reason for Proposed Change:

Adding PHY 324(3) to the Physics Core of Courses.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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Current Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
3. Select one of the following option areas:
 - a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 - b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)
 - c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 - d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)
4. Related Requirements: MTH 280(5), 302(3), 303(3)

Complete New Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)

2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).

3. Select one of the following option areas:

a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)

b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)

c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)

d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

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Missouri State

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Rebecca Baker (Beckybak@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Physics/Engineering and Applied Physics-BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)

- Course changes of under 18 hours
- From program (major) to option
- Other Delete Option
- Course changes of 18 hours or more

Reason for Proposed Change:

low interest in option from students

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

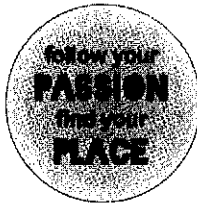
College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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Current Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)

2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).

3. Select one of the following option areas:

a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)

b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)

c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)

d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

Complete New Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)

2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).

3. Select one of the following option areas:

a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)

~~b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)~~

c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)

d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

21

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Rebecca Baker (Beckybak@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
Minor
Academic Rules
Comprehensive Major
Certificate
Other
Option
Certification

Title of Program Affected:

Physics/Materials Physics-BS

Current Catalog Description: (Either cut and paste present description from online catalog OR provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] OR provide as an attachment below)

Navigation icons: back, forward, bold, italic, strikethrough

Attached

What is changing? Check all boxes that apply:

- Title change
From option to program (major)
Other

Course changes of under 18 hours From program (major) to option

Course changes of 18 hours or more

Reason for Proposed Change:

Added PHY 324(3) to Physics Core of courses.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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21

Current Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)

2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).

3. Select one of the following option areas:

a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)

b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)

c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)

d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C. General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

Complete New Catalog Description

21

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

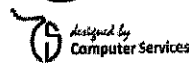
1. PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
3. Select one of the following option areas:
 - a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 - b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)
 - c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 - d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)
4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

22

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Rebecca Baker (Beckybak@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Physics/Graduate Prep Physics:BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

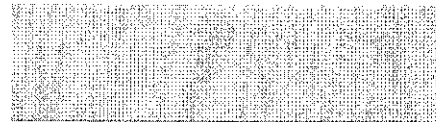
← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other

- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more



Reason for Proposed Change:

Changed to better address the needs of the department's students.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

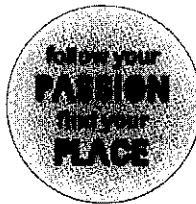
College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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Current Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)

2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).

3. Select one of the following option areas:

a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)

b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)

c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)

d. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

Complete New Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
3. Select one of the following option areas:
 - a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 - b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)
 - c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 - d. Graduate Career Prep Physics: ~~MAT 580(3)~~; ~~PHY 351(3)~~, ~~476(3)~~, ~~575(3)~~ PHY 351(3) and one of either PHY 575(3) or MAT 540(3) and three hours of 400 or 500 level PHY, MAT or CHM coursework

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements
section of catalog

Missouri State.**Curricular Action Workflow**

Missouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - New Program Proposal Form

New Program Proposal Form

Submitted on 03/31/2017 by Rebecca Baker (Beckybak@missouristate.edu).

This form is to be used for internal Missouri State approval of any proposal for a new program involving two or more courses, including any new graduate program, new undergraduate major (whether comprehensive or non-comprehensive), new option within an existing program (whether graduate or undergraduate), new minor, new certificate, or new certification program.

New graduate programs, new undergraduate majors, and certificate programs involving more than 18 credit hours require approval by the CBHE as well as approval through the Missouri State curricular process. CBHE applications for such programs are processed through the Office of Institutional Research. All proposals for new programs requiring CBHE approval should progress through the Missouri State curricular process accompanied by a draft of the required CBHE documentation.

Department:

Physics, Astronomy, & Mat Sci

Proposed Program Title:

BS in Physics, Teaching Prep Physics Option

Choose One:

- Major (Non-Comprehensive/Graduate Program)

 Minor

 Academic Rules
 Comprehensive Major

 Certificate

 Other
 Option

 Certification

Select Degree Type (or Select Graduate Certificate or Undergraduate Certificate):

BS - Bachelor of Science

General Education Courses Required:

PHY 203(5), MTH 261(5), ENG 321(3)

Total Hours: 13

General Education Courses Recommended:

GRY 108(3)

Total Hours: 3

Requirements (including Admission) and Limitations for Specific Degree/Program:

No additional requirements other than those required by MSU.

Total Hours: 0

Courses Required in Department:

1. Core: PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 359(3), 375(3), 385(2), 386(1), 391(3), 486(1)
 2. Option: AST 115 (4) and at least six credit hours from any 300 or 400 level courses from AST, MAT or PHY excluding PHY 501

Total Hours: 43

Courses Required in Other Departments:

1. Related Requirements: MTH 280(5), 302(3), 303(3)

Total Hours: 11

Prerequisites for Required Courses:

CSC 125(3), MTH 181(3), 261(5), 280(5), 302(3), 303(3)

Recommended Electives in Department:

Any course within the Department of Physics, Astronomy and Materials Science or Department of Chemistry.

Total Hours: 6

Recommended Electives in Other Departments:

None

Total Hours: 0

Limitations on Electives:

PHY 501(3)

Please attach the following documents: (only one file may be attached for each requirement; accepts file types of PDF, DOC or DOCX)

1. Statement of Rationale: *Attached*
2. Estimated costs for first five years: *Attached*
3. Complete catalog description (including new courses and course changes pending approval): *Attached*
4. CBHE Application (if applicable): *Not Attached*

*Note: For new programs requiring CBHE approval, CBHE forms NP, PS, and PG will satisfy #1 and CBHE form FP will satisfy #2.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

23

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (David Cornelison)

Review Comments:

No comments have been added to this proposal.



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Statement of Rationale for BS in Physics: Teaching Prep Physics Option

After much discussion within the department, it was felt that students wishing to become secondary science teachers would be better served with a BS degree in physics in terms of content knowledge and opportunities available to them if they choose to not stay in the teaching field. It is highly recommended that the student plan this program in consultation with their advisor. The Teaching Prep Physics Option does not include courses in teacher education that are required for Certification by the state of Missouri. They can be met through a post-baccalaureate program or masters programs at Missouri State University such as the MAT or MNAS program.

23

There are no new costs for this program.

23

Complete New Catalog Description

Physics

Major(s)

Physics (Comprehensive)

Bachelor of Science

A General Education Requirements - see General Education Program and Requirements section of catalog

Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)

B Major Requirements

1. PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
2. Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
3. Select one of the following option areas:
 - a. Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 - b. Engineering and Applied Physics: PHY 220(4), 324(4), 351(3)
 - b. Graduate Prep Physics: MAT 580(3); PHY 351(3), 476(3), 575(3)
 - c. Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 - d. Teaching Prep Physics: AST 115 (4); GRY 108(3) and at least six credit hours from any 300 or 400 level courses from AST, MAT or PHY excluding PHY 501. For students interested in this

option it is recommended that you reference the information included in the Undergraduate Catalog under Overview and Programs for Physics.

4. Related Requirements: MTH 280(5), 302(3), 303(3)

C General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

24

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/27/2017 by S Mathis (Aliciamathis@missouristate.edu).

Department:

Biology

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Biology-BA-Minor-Required

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Biology (Non-Comprehensive) (BA)
Bachelor of Arts
 General Education Requirements - see General Education Program and Requirements section of catalog
Major Requirements
BIO 121(4), 122(4), 235(4), 310(5) or 320(4), 369(4), 494(1), 550(3)
 Select elective courses in biology to total a minimum of 32 hours and include at least 12 hours of 300 level or higher courses. Electives may be selected from one of the following emphases. Advisors can assist students to select electives to emphasize areas that best meet their interest and career goals. Popular areas of emphasis include pre-health studies (pre-medical, pre-veterinary, pre-physical therapy, etc.), microbiology, cell/molecular biology, environmental/conservation biology, and zoology, but other areas of emphasis are also possible.
 Related Requirements: CHM 201(3) and 202(2), or CHM 342(5) and 343(5) or 344(3); PHY 123(4) and 124(4) or PHY 203(5) and 204(5); MTH 261(5) or 287(3)
 Public Affairs Capstone Experience will be fulfilled by completion of BIO 369(4) and 494(1) and one additional course from the following: BIO 300(1), 355(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Course may also be used to satisfy the elective courses in biology.
Minor Required (or second major)
 Specific Requirements for Bachelor of Arts Degree - see Specific Bachelor of Arts Degree Requirements section of catalog
 General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Biology (Non-Comprehensive) (BA)
Bachelor of Arts
 General Education Requirements - see General Education Program and Requirements section of catalog
Major Requirements **BIO 121(4), 122(4), 235(4), 310(5) or 320(4), 369(4), ~~494~~**302**(1), 550(3)**
 Select elective courses in biology to total a minimum of 32 hours and include at least 12 hours of 300 level or higher courses. Electives may be selected from one of the following emphases. Advisors can assist students to select electives to emphasize areas that best meet their interest and career goals. Popular areas of emphasis include pre-health studies (pre-medical, pre-veterinary, pre-physical therapy, etc.), microbiology, cell/molecular biology, environmental/conservation biology, and zoology, but other areas of emphasis are also possible.
 Related Requirements: CHM 201(3) and 202(2), or CHM 342(5) and 343(5) or 344(3); PHY 123(4) and 124(4) or PHY 203(5) and 204(5); MTH 261(5) or 287(3)
 Public Affairs Capstone Experience will be fulfilled by completion of BIO 369(4) and **494302**(1) and one additional course from the following: BIO 300(1), 355(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Course may also be used to satisfy the elective courses in biology.
Minor Required (or second major)
 Specific Requirements for Bachelor of Arts Degree - see Specific Bachelor of Arts Degree Requirements section of catalog
 General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Total Hours: **125**

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

BIO 494 is Senior Seminar. The department wants to encourage students to take a seminar earlier in their program of study. We are replacing BIO 494 with BIO 302 Biology Seminar.

24

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

11/18/2016

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.

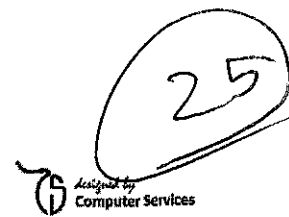


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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/27/2017 by Rachel Rigby (RachelRigby@MissouriState.edu).

Department:

Biology

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Biology-BS-Minor Required

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Biology (Non-Comprehensive) (BS)

Bachelor of Science

General Education Requirements - see General Education Program and Requirements section of catalog

Major Requirements

BIO 121(4), 122(4), 235(4), 310(5) or 320(4), 369(4), 494(1), 550(3)

Select elective courses in biology to total a minimum of 36 hours and include at least 12 hours of 300-level or higher courses. Advisors can assist students to select electives to emphasize areas that best meet their interest and career goals.

Popular areas of emphasis include pre-health studies (pre-medical, pre-veterinary, pre-physical therapy, etc.), microbiology, cell/molecular biology, environmental/conservation biology, and zoology, but other areas of emphasis are also possible.

Public Affairs Capstone Experience will be fulfilled by completion of BIO 369(4) and 494(1) and one additional course from the following: BIO 300(1), 355(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3).

Course may also be used to satisfy the elective courses in biology.

Related Requirements: CHM 201(3) and 202(2), or CHM 342(5) and 343(5) or 344(3); PHY 123(4) and 124(4) or PHY 203(5) and 204(5); MTH 261(5) or 287(3)

Minor Required (or second major)

General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [Strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] OR provide as an attachment below)

← → **B** *I* ~~S~~

Biology (Non-Comprehensive) (BS)
 Bachelor of Science
 General Education Requirements - see General Education Program and Requirements section of catalog
 Major Requirements
 BIO 121(4), 122(4), 235(4), 310(5) or 320(4), 369(4), 494 **302(1)**, 550(3)
 Select elective courses in biology to total a minimum of 36 hours and include at least 12 hours of 300-level or higher courses. Advisors can assist students to select electives to emphasize areas that best meet their interest and career goals. Popular areas of emphasis include pre-health studies (pre-medical, pre-veterinary, pre-physical therapy, etc.), microbiology, cell/molecular biology, environmental/conservation biology, and zoology, but other areas of emphasis are also possible.
 Public Affairs Capstone Experience will be fulfilled by completion of BIO 369(4) and 494 **302(1)** and one additional course from the following: BIO 300(1), 355(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Course may also be used to satisfy the elective courses in biology.
 Related Requirements: CHM 201(3) and 202(2), or CHM 342(5) and 343(5) or 344(3); PHY 123(4) and 124(4) or PHY 203(5) and 204(5); MTH 261(5) or 287(3)
 Minor Required (or second major)
 General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Not Attached

Total Hours: 125

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

BIO 494 is Senior Seminar. The department wants to encourage students to take a seminar earlier in their program of study. We are replacing BIO 494 with BIO 302 Biology Seminar.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

11/18/2016

Current Status:

College Council Review

25

Proposal Progress:

03/31/2017 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.



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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/27/2017 by Rachel Rigby (RachelRigby@MissouriState.edu).

Department:

Biology

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Biology-BS-Minor Required

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Biology (Comprehensive) (BS)

Bachelor of Science

General Education Requirements - see General Education Program and Requirements section of catalog

Major Requirements

BIO 121(4), 122(4), 235(4), 494(1), 550(3)

PHY 123(4) and 124(4) or PHY 203(5) and 204(5)

MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test

BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course

CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course

CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course

Public Affairs Capstone Experience will be fulfilled by completion of BIO 494(1) and two additional courses from the following: BIO 300(1), 355(4), 369(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.

Complete requirements in one of the following options*: Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [Strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] OR provide as an attachment below)

← → **B** *I* ~~S~~

Biology (Comprehensive) (BS)
 Bachelor of Science
 General Education Requirements - see General Education Program and Requirements section of catalog
 Major Requirements
 BIO 121(4), 122(4), 235(4), 494 **302(1)**, 550(3)
 PHY 123(4) and 124(4) or PHY 203(5) and 204(5)
 MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test
 BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course
 CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course
 CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course
 Public Affairs Capstone Experience will be fulfilled by completion of BIO 494 **302(1)** and two additional courses from the following: BIO 300(1), 355(4), 369(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.
 Complete requirements in one of the following options*: Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.

Not Attached

Total Hours: 125

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

BIO 494 is Senior Seminar. The department wants to encourage students to take a seminar earlier in their program of study. We are replacing BIO 494 with BIO 302 Biology Seminar.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

11/18/2016

Current Status:

Withdrawn

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Proposal Progress:

This proposal is waiting for its first review.

Review Comments:

No comments have been added to this proposal.



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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 03/31/2017 by Georgianna Saunders (Gigisaunders@missouristate.edu).

Department:

Biology

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Biology/Wildlife Biology-BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Attached

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)

- Course changes of under 18 hours
- Course changes of 18 hours or more
- From program (major) to option
- Other

Creation of a new option in the BS
Biology Comprehension program

Reason for Proposed Change:

1. BIO 494 is being replaced by BIO 302. This will effect all options in the program.
2. ***** The new option applies to the BS in Biology Comprehensive degree, not just the Wildlife Biology option. The Wildlife Biology option becomes choice d rather than choice c.
This new option provides basic science content competencies for students preparing to enter post-graduate studies to become a high school science teacher. This track does not include courses in teacher education that are required by the state of Missouri for certification as a teacher. Certification requirements can be met through post-baccalaureate programs or masters programs.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

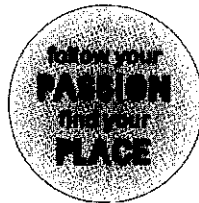
College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.



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Biology (Comprehensive) (BS)

Bachelor of Science

1. General Education Requirements - see General Education Program and Requirements section of catalog
2. Major Requirements
 1. BIO 121(4), 122(4), 235(4), 494(1), 550(3)
 2. PHY 123(4) and 124(4) or PHY 203(5) and 204(5)
 3. MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test
 4. BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course
 5. CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course
 6. CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course
 7. Public Affairs Capstone Experience will be fulfilled by completion of BIO 494(1) and two additional courses from the following: BIO 300(1), 355(4), 369(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(2), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.
 8. Complete requirements in one of the following options*: Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.
 - a. **Environmental Biology and Evolution** (71-85 hours total)
 1. Required courses: BIO 369(4), 515(3)

2. Complete courses in biodiversity and evolution totaling at least 3 hours from the following: BIO 334(3), 339(2), 370(4), 371(3), 380(5), 530(3), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 534(2), 535(1), 555(3), 556(3), 587(3), 588(3)
3. Complete courses in population biology totaling at least 3 hours from the following: BIO 436(4), 505(3), 532(3), 540(4), 560(3), 563(3), 567(4), 578(4), 584(3), 589(3); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 557(2), 558(2)
4. Complete courses in community/ecosystem biology totaling at least 3 hours from the following: BIO 373(3), 485(1-3), 508(3), 509(4), 533(3), 539(2), 547(3), 562(4), 579(4); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 537(2), 538(2), 565(3), 566(2)
5. Students must take at least one biology course with a substantial field component. A course used to satisfy this requirement also may be counted toward the biodiversity, population biology, and community/ecosystem biology concentration areas described above. Complete one of the following: BIO 334(3), 339(2), 370(4), 436(4), 509(3), 527(1-4), 562(4), 574(2), 575(3), 576(3), 577(3), any biology course taught at the Gulf Coast Research Laboratory, any biology course taught at the Bull Shoals Field station or another field station (with the approval of your advisor)
6. Complete 0-7 hours of elective BIO courses at the level of 300 or higher to total a minimum of 43 hours in biology
7. Complete at least one of the following related requirements in Mathematics, Statistics, or Computer programming: MTH 261(5) or 287(3) or 546(3) or 547(3) or CSC 125(4) or CSC 130(3) or BIO 551(2) or PSY 527(3)
8. Related requirements in Chemistry: CHM 160(4), 161(1), 170(3), 171(1)
9. Complete one of the following related science courses: AGN 215(3), ANT 375(3); CHM 260(3) or 460(3); GLG 171(3), GRY 351(3)
10. Complete one of the following from related fields of study: ECO 540(3), LAW 537(3), PHI 302(3), PLS 555(3), PSY 379(3)

b. **Microbiology and Biotechnology** (71-87 hours total)

1. Required courses: BIO 310(5), 320(4)
2. Complete 21 additional hours in BIO courses with a minimum of 18 hours from the following: BIO 355(4), 508(3), 511(4), 512(3); 505(3) or 515(3); 517(4), 518(2), 520(3), 530(3), 540(4); BMS 524(3) may be substituted for one of these courses; CHM 302(5) or 502(4) or 505(4) may be substituted for one of these courses
3. Related requirements in Chemistry: CHM 160(4), 161(1), 170(3), 171(1); CHM 201(3) and 202(2), or CHM 342(5) and 343(5), or CHM 342(5) and 344(3); CHM 352(3), or CHM 452(3) and 552(3)

c. **Wildlife Biology** (67-87 hours total)

1. Required courses: BIO 320(4) or 361(4), 369(4)
2. Complete two courses in plant biology from: BIO 334(3), 339(2), 530(3), 544(4)
3. Complete three courses in animal biology from: BIO 370(4), 371(3), 380(5), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3)
4. Complete a minimum of 5 hours in management from: BIO 373(3), 485(1-3), 509(4), 532(3), 562(4), 589(3)
5. Complete two courses in ecology and evolution from: BIO 436(4), 515(3), 539(2), 563(3), 567(4), 578(4), 579(4), 584(3)
6. Complete one course in human dimensions from the following: AGN 335(3), BIO 547(3), BIO 561(2), CRM 210(3), ECO 540(3), GRY 108(3), GRY 351(2), PHI 302(3), PLS 555(3), LAW 537(3)
7. Complete one course in earth/environmental science: AGN 215(3), CHM 260(3), GLG 110(4), GRY 142(4)

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Biology (Comprehensive) (BS)

Bachelor of Science

1. General Education Requirements - see General Education Program and Requirements section of catalog
2. Major Requirements
 1. BIO 121(4), 122(4), 235(4), 494 302(1), 550(3)
 2. PHY 123(4) and 124(4) or PHY 203(5) and 204(5)
 3. MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test
 4. BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course
 5. CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course
 6. CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course
 7. Public Affairs Capstone Experience will be fulfilled by completion of BIO 494 302(1), and two additional courses from the following: BIO 300(1), 355(4), 369(4), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(2), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.
 8. Complete requirements in one of the following options*: Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.
 - a. **Environmental Biology and Evolution** (71-85 hours total)
 1. Required courses: BIO 369(4), 515(3)

2. Complete courses in biodiversity and evolution totaling at least 3 hours from the following: BIO 334(3), 339(2), 370(4), 371(3), 380(5), 530(3), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 534(2), 535(1), 555(3), 556(3), 587(3), 588(3)
3. Complete courses in population biology totaling at least 3 hours from the following: BIO 436(4), 505(3), 532(3), 540(4), 560(3), 563(3), 567(4), 578(4), 584(3), 589(3); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 557(2), 558(2)
4. Complete courses in community/ecosystem biology totaling at least 3 hours from the following: BIO 373(3), 485(1-3), 508(3), 509(4), 533(3), 539(2), 547(3), 562(4), 579(4); the following courses taught during the summer at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi: BIO 537(2), 538(2), 565(3), 566(2)
5. Students must take at least one biology course with a substantial field component. A course used to satisfy this requirement also may be counted toward the biodiversity, population biology, and community/ecosystem biology concentration areas described above. Complete one of the following: BIO 334(3), 339(2), 370(4), 436(4), 509(3), 527(1-4), 562(4), 574(2), 575(3), 576(3), 577(3), any biology course taught at the Gulf Coast Research Laboratory, any biology course taught at the Bull Shoals Field station or another field station (with the approval of your advisor)
6. Complete 0-7 hours of elective BIO courses at the level of 300 or higher to total a minimum of 43 hours in biology
7. Complete at least one of the following related requirements in Mathematics, Statistics, or Computer programming: MTH 261(5) or 287(3) or 546(3) or 547(3) or CSC 125(4) or CSC 130(3) or BIO 551(2) or PSY 527(3)
8. Related requirements in Chemistry: CHM 160(4), 161(1), 170(3), 171(1)
9. Complete one of the following related science courses: AGN 215(3), ANT 375(3); CHM 260(3) or 460(3); GLG 171(3), GRY 351(3)
10. Complete one of the following from related fields of study: ECO 540(3), LAW 537(3), PHI 302(3), PLS 555(3), PSY 379(3)

b. **Microbiology and Biotechnology** (71-87 hours total)

1. Required courses: BIO 310(5), 320(4)
2. Complete 21 additional hours in BIO courses with a minimum of 18 hours from the following: BIO 355(4), 508(3), 511(4), 512(3); 505(3) or 515(3); 517(4), 518(2), 520(3), 530(3), 540(4); BMS 524(3) may be substituted for one of these courses; CHM 302(5) or 502(4) or 505(4) may be substituted for one of these courses
3. Related requirements in Chemistry: CHM 160(4), 161(1), 170(3), 171(1); CHM 201(3) and 202(2), or CHM 342(5) and 343(5), or CHM 342(5) and 344(3); CHM 352(3), or CHM 452(3) and 552(3)

c. **Pre-Teacher Education** (71 - 73 hours total)*:

1. Required courses: : BIO 310(5), 361(4), 369(4), 515(3)
2. Complete a minimum of 9 additional hours of upper level Biology courses (with approval of advisor).
3. Related requirements in Chemistry: CHM 160(4), 161(1), 170(3), 171(1); CHM 201(3) and 202(2), or CHM 302(5)
4. Complete the following related science courses: GLG 171(3); GRY 135(3); SCI 505(3)
5. Complete at least one of the following related requirements in Mathematics: MTH 181(3), or eligibility for MTH 261 on mathematics placement test

* This option is designed for students preparing to enter post-graduate studies to become a high school science teacher. This program does not include courses in teacher education that are required by the state of Missouri for certification as a teacher. Certification requirements can be met through post-baccalaureate programs or masters programs at Missouri State University.

e. d. **Wildlife Biology** (67-87 hours total)

4. Required courses: BIO 320(4) or 361(4), 369(4)

5. Complete two courses in plant biology from: BIO 334(3), 339(2), 530(3), 544(4)
6. Complete three courses in animal biology from: BIO 370(4), 371(3), 380(5), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3)
7. Complete a minimum of 5 hours in management from: BIO 373(3), 485(1-3), 509(4), 532(3), 562(4), 589(3)
8. Complete two courses in ecology and evolution from: BIO 436(4), 515(3), 539(2), 563(3), 567(4), 578(4), 579(4), 584(3)
9. Complete one course in human dimensions from the following: AGN 335(3), BIO 547(3), BIO 561(2), CRM 210(3), ECO 540(3), GRY 108(3), GRY 351(2), PHI 302(3), PLS 555(3), LAW 537(3)
10. Complete one course in earth/environmental science: AGN 215(3), CHM 260(3), GLG 110(4), GRY 142(4)

General Baccalaureate Degree Requirements - see General Baccalaureate Degree Requirements section of catalog

Missouri State.**Curricular Action Workflow**
 Missouri State > Computer Services - MIS > Curricular Action
 Workflow > CAW - New Course Proposal Form
New Course Proposal Form
Submitted on 03/31/2017 by Ryan Udan (RyanUdan@MissouriState.edu).
***All fields require input**
 New COURSE

 New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code:

BIO

Course Number: (Check Availability)

302

Course Title:

Biology Seminar

 Will this proposal need to be reviewed by CGEIP? No Yes

 Will this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter 'None':

Bio121 or BMS110; BIO122

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)

Introduction to major fields of study in biology, the role of biology in the public affairs mission, and information on career development, undergraduate research, study-away opportunities, and applying to graduate/professional schools. Graded Pass/Not Pass only. Public affairs capstone experience course.

Credit Hours:

1

Lecture Contact Hours:

1

Lab Contact Hours:

0

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.



Fall



Fall (even-numbered years only)



Fall (odd-numbered years only)

- Spring Spring (even-numbered years only) Spring (odd-numbered years only)
- Summer On Demand only

Complete Catalog Description:

BIO 302 Biology Seminar

Prerequisite: BIO121 or BMS110; BIO122

Introduction to major fields of study in biology, the role of biology in the public affairs mission, and information on career development, undergraduate research, study-away opportunities, and applying to graduate/professional schools. Graded Pass/Not Pass only. Public affairs capstone experience course.

Credit hours: 1 Lecture contact hours: 1 Lab contact hours: 0

Typically offered: Fall, Spring

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Attached

Purpose of Course

1) To provide students with a preview of future biology elective courses, 2) To provide students with information regarding career development, undergraduate research, study away opportunities, and applying to graduate school.

Relationship to Other Departments

None

Is there a graduate/undergraduate parallel course to this one? No Yes

New Course Resource Information

Anticipated Average Enrollment per section:	<input type="text" value="70"/>	Maximum Enrollment Limit per section:	<input type="text" value="100"/>
Anticipated Average Enrollment per semester:	<input type="text" value="70"/>	Maximum Enrollment Limit per semester:	<input type="text" value="100"/>
Anticipated Average Enrollment per year:	<input type="text" value="140"/>	Maximum Enrollment Limit per year:	<input type="text" value="200"/>
Faculty Load Assignment (equated hours):	<input type="text" value="1"/>		

Is another course being deleted? No Yes

Select course number and title being deleted.

BIO494 Senior Seminar

What will this course require in the way of:

Additional library Holdings

NA

Additional computer resources

NA

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Additional or remodeled facilities

NA

Additional equipment or supplies

NA

Additional travel funds

NA

Additional faculty; general vs specialized

NA

Additional faculty; regular vs per-course

NA

Other additional expenses

NA

If additional faculty are not required, how will faculty be made available to teach this course?

This course will eventually replace Bio494 (Senior Seminar)

List names of current faculty qualified and available to teach this course

All biology faculty: especially Tom Tomasi, Chris Barnhart, John Heywood and Ryan Udan

What is the anticipated source of students for this course?

Biology Majors

If from within the department, will students be taking this course in addition to or in place of other courses?

In place of Bio494

If from outside the department, which courses in other departments would most likely be affected?

NA

Other comments:

The purpose of this course change is to encourage students to take the course earlier in their studies than was the case with the course it is replacing (Bio494, senior seminar)

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

3/31/17

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.



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Bio 302: Biology seminar: discovering your path in biology

Course Objectives:

This class is designed to provide...

- 1) a preview of future biology elective courses that you may want to take
- 2) information about career development, undergraduate research, study away opportunities, and applying to graduate school

Instructor: Dr. Ryan Udan (ryanudan@missouristate.edu), Temple 227; 836-5307,

Office Hours: 2:30-4:00 pm, Thr and Fri

Class meetings: Room: Temple 120 Time: 3:30 pm to 4:20pm

Class organization:

In each class there will be a presentation or discussion on a particular topic that is led by either myself or invited speakers. Following presentations, there will be a short question and answer (Q&A) period.

Prerequisites:

Bio121 and ≥ 30 total credit hours

Course requirements:

- Attendance
- Completion of full evaluation of the course
- Completion of course waiver for senior seminar

Grading:

This is a pass/not pass course. Note that if you receive a "not pass" then, you will receive an "F" on your transcript. There are three requirements to pass the class **1)** attendance, **2)** fill out a "degree works course exception" form for a course waiver (see "senior seminar course waiver" below), and **3)** a full evaluation of the course at the end. Regarding attendance, you must be absent no more than two of the presentations. You must stay for the entire presentation for it to count (including the Q&A section at the end). If you are absent for more than two presentations, then you will need to write a 10-page term paper on an assigned topic (decided by the instructor) for every presentation after the two that is missed. Detailed instructions will be provided on the paper if necessary, and the instructions must be followed exactly.

Behavior at the presentations

Considering that invited speakers are using their spare time to present, please be respectful to the presenter. So, be attentive, put your cell phones away, do not leave during the presentation, and when appropriate, I expect students to participate in discussions. For example, I encourage students to ask questions at the end of the presentation.

Cell phone policy:

As a member of the learning community, each student has a responsibility to other students who are members of the community. When cell phones or pagers ring and students respond in class or leave class to respond, it disrupts the class. Therefore, the Office of the Provost prohibits the use by students of cell phones, pagers, PDAs, or similar communication devices during scheduled classes. All such devices must be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Other exceptions to this policy may be granted at the discretion of the instructor.

Academic integrity:

Missouri State University is a community of scholars committed to developing educated persons who accept the responsibility to practice personal and academic integrity. You are responsible for knowing and following the university's student honor code, Student Academic Integrity Policies and Procedures, available at www.missouristate.edu/policy/academicintegritystudents.htm and also available at the Reserves Desk in Meyer Library. Any student participating in any form of academic dishonesty will be subject to sanctions as described in this policy.

Cheating, plagiarism, forgery, and classroom disruption are serious academic offenses and will be treated accordingly. **Cheating** is presenting others' work as your own and includes aiding others to cheat. **Plagiarism** is using others' ideas without citing the source, or submitting work aided so much by others that it is different from your own work.

Non-discrimination Policy:

Missouri State University is an equal opportunity/affirmative action institution, and maintains a grievance procedure available to any person who believes he or she has been discriminated against. At all times, it is your right to address inquiries or concerns about possible discrimination to the Office for Equity and Diversity, Park Central Office Building, 117 Park Central Square, Suite 111, (417) 836-4252. Other types of concerns (i.e., concerns of an academic nature) should be discussed directly with your instructor and can also be brought to the attention of your instructor's Department Head. Please visit the OED website at www.missouristate.edu/equity/.

Disability Accommodation Policy:

To request academic accommodations for a disability, contact Justin Lozano, Disability Resource Center (<http://www.missouristate.edu/disability>), Meyer Library, Suite 111 (417) 836-4192 or (417) 836-6792 (TTY). Students are required to provide documentation of disability to Disability Services prior to receiving accommodations. Disability Services refers some types of accommodation requests to the Learning Diagnostic Clinic, which also provides diagnostic testing for learning and psychological disabilities. (A fee is charged for testing.) For information about

testing, contact the Learning Diagnostic Clinic (417) 836-4787;
<http://psychology.missouristate.edu/ldc/>.

Emergency Response Policy:

You should become familiar with a basic emergency response plan by becoming aware of exits specific to the classroom and the location of evacuation centers for the building. Students with disabilities impacting mobility should discuss the approved accommodations for emergency situations and additional options when applicable with the instructor. For more information go to <http://www.missouristate.edu/safetran/51597.htm> and <http://www.missouristate.edu/safetran/erp.htm>.

Dropping the class:

It is your responsibility to understand the University's procedure for dropping a class. *If you stop attending but do not follow proper procedure for dropping, you will receive a failing grade and will be obligated to pay for the class.* Classes may be dropped online through the My Missouri State system or in person at the Office of the Registrar with appropriate identification. No drops or withdrawals are allowed after the stated deadline to drop a class. University athletes must process all registration and Change of Schedules in the Achievement Center for Intercollegiate Athletics, Forsyth Athletic Center 239. Students who have a hold which prevents using the web registration system can visit the Office of the Registrar in person, fax a signed registration form, or send an email to registrar@missouristate.edu from their University email account. Prior to **January 23rd**, dropped courses will not appear on the transcript. Classes may be dropped with a "W" grade from the end of the Change of Schedule period until **April 14th**. Be sure to talk to your advisor before deciding to drop a class.

Tentative Schedule

Date	Name	Topic
1/17/2017	Udan	Introduction and Career Assessment
1/24/2017	Lupfer	Bioethics of medicine (focus on immunology examples)
1/31/2017	Kovacs	Biology: building bridges and dissolving boundaries
2/7/2017	Strafford	Veterinarian perspective of vivariums, zoos, and aquariums
2/14/2017	B. Greene/Maher	Quantitative approaches in biology
2/21/2017	Ligon	Knowing and avoiding plaigarism in scientific writing
2/28/2017	Schweiger	Bioengineering ethics
3/7/2017	J. Greene	Study away opportunities, and/or certificates/postbac programs
3/14/2017	-----	No Class-Spring Break
3/21/2017	Kisson-Charles	Carnivores of the wetlands
3/28/2017	Tomasi	Applying to graduate school
4/4/2017	Heywood	Explaining the oddities of life
4/11/2017	Udan	Seeking opportunities for undergraduate research
4/18/2017	Tomasi	Applied vs basic research (focus on physiological ecology examples)
4/25/2017	Kim	Cell trafficking
5/2/2017	Udan	Mutants: defects in human development

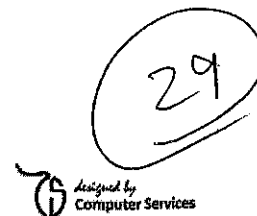
5/9/2017

Udan

Course survey and verification of course waiver

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - New Course Proposal Form

New Course Proposal Form

Submitted on 03/31/2017 by John Heywood (Johnheywood@missouristate.edu).

***All fields require input**

New COURSE

New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code:

BIO

Course Number: (Check Availability)

492

Course Title:

Biology Program Assessment

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter 'None':

90 hours including 20 hours of BIO courses, and biology major

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)

Comprehensive assessment examination for biology majors. Graded Pass/Not Pass only.

Credit Hours:

0

Lecture Contact Hours:

0

Lab Contact Hours:

0

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.

- Fall Fall (even-numbered years only) Fall (odd-numbered years only)
- Spring Spring (even-numbered years only) Spring (odd-numbered years only)
- Summer On Demand only

Complete Catalog Description:

BIO 492 Biology Program Assessment

Prerequisite: 90 hours including 20 hours of BIO courses, and biology major

Comprehensive assessment examination for biology majors. Graded Pass/Not Pass only.

Credit hours: 0 Lecture contact hours: 0 Lab contact hours: 0

Typically offered: Fall, Spring

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Students enrolled in BIO 492 will sign up for the Biology Major Field Test (MFT) via a link in Blackboard. The MFT will be administered at the Testing Center in Meyer Library, with accommodations for disabilities as required. Students will receive a grade of "pass" upon completion of the Biology MFT.

Not Attached

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Purpose of Course

This course will allow the biology department to track completion of the Major Field Test in Biology, a program requirement for the non-comprehensive and comprehensive majors in Biology. This tracking is currently done in BIO 494 (senior seminar) which is being replaced by a sophomore-level course, BIO 302.

Relationship to Other Departments

None

Is there a graduate/undergraduate parallel course to this one? No Yes

New Course Resource Information

Anticipated Average Enrollment per section:	70	Maximum Enrollment Limit per section:	999
Anticipated Average Enrollment per semester:	70	Maximum Enrollment Limit per semester:	999
Anticipated Average Enrollment per year:	140	Maximum Enrollment Limit per year:	999
Faculty Load Assignment (equated hours):	0		

Is another course being deleted? No Yes

What will this course require in the way of:

Additional library Holdings

none

Additional computer resources

none

Additional or remodeled facilities

none

Additional equipment or supplies

none

Additional travel funds

none

Additional faculty; general vs specialized

none

Additional faculty; regular vs per-course

none

Other additional expenses

none

If additional faculty are not required, how will faculty be made available to teach this course?

Not applicable - this course carries no credits and has no contact hours. The assigned faculty member will have a purely administrative role.

List names of current faculty qualified and available to teach this course

All

What is the anticipated source of students for this course?

biology majors

If from within the department, will students be taking this course in addition to or in place of other courses?

This course and BIO 302 will replace BIO 494, with no change in total credit hour requirements. BIO 494 will remain active during the transition, after which it will be deleted.

If from outside the department, which courses in other departments would most likely be affected?

N/A

Other comments:

None

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

03/31/2017

Current Status:

College Council Review

Proposal Progress:

03/31/2017 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.



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